

WHAT IS CLAIMED IS:

1. A method of reducing energy consumption in a building comprising:
coating one or more external vertical walls of said building with a heat reflective wall paint comprising at least one heat reflective metal oxide pigment;
wherein the surface temperature of the resultant coated wall is lowered such that less energy is consumed to cool the interior of said building.

2. A method of painting an external vertical wall of a building comprising:
applying a heat reflective wall paint comprising at least one heat reflective metal oxide pigment to said wall,
wherein said wall paint comprises at least one heat reflective metal oxide pigment.

3. The method of claim 1, wherein said heat reflective wall paint comprises titanium dioxide.

4. The method of claim 1, wherein said heat reflective metal oxide pigment comprises a solid solution having a corundum–hematite crystal lattice structure.

5. The method of claim 1, wherein said heat reflective metal oxide pigment is an oxide of a metal selected from the group consisting of aluminum, antimony, bismuth, boron, chrome, cobalt, gallium, indium, iron, lanthanum, lithium, magnesium, manganese, molybdenum, neodymium, nickel, niobium, silium, tin, vanadium, and zinc.

6. The method of claim 1, wherein said coated wall reflects light of infrared wavelengths.
7. The method of claim 6, wherein said infrared wavelength ranges from 750 to 2500 nm.
8. The method of claim 7, wherein said infrared wavelength ranges from 800 to 2450nm.
9. The method of claim 8, wherein said infrared wavelength ranges from 900 to 2400nm.
10. The method of claim 9, wherein said infrared wavelength ranges from 1000 to 2300nm.
11. The method of claim 10, wherein said infrared wavelength ranges from 1500 to 2000nm.
12. The method of claim 6, wherein said coated wall exhibits an infrared reflectance above 30%.
13. The method of claim 12, wherein said coated wall exhibits an infrared reflectance above 50%.

14. The method of claim 13, wherein said coated wall exhibits an infrared reflectance above 70%.
15. The method of claim 1, wherein the color of said heat reflective wall paint is not white.
16. The method of claim 15, wherein said heat reflective wall paint is a dark color.
17. The method of claim 16, wherein said heat reflective wall paint is black, blue, green, yellow, red, or any combination thereof.
18. The method of claim 1, wherein said heat reflective wall paint comprises from 35 to 50% solids by weight, and from 30 to 40% solids by volume.
19. The method of claim 18, wherein said heat reflective wall paint comprises from 37 to 47% solids by weight, and from 32 to 38% solids by volume.
20. The method of claim 1, wherein the surface temperature of said coated wall is lowered by at least 20 °F.

21. The method of claim 20, wherein the surface temperature of said coated wall is lowered by at least 30°F.

22. The method of claim 21, wherein the surface temperature of said coated wall is lowered by at least 40°F.

23. The method of claim 22, wherein the surface temperature of said coated wall is lowered by at least 50°F.

24. A composition of matter comprising:

a base paint, for application to external vertical walls, combined with at least one heat reflective metal oxide pigment.

25. The composition of claim 24, wherein said composition comprises from 35 to 50% solids by weight, and from 30 to 40% solids by volume.

26. The composition of claim 25, wherein said composition comprises from 37 to 47% solids by weight, and from 32 to 38% solids by volume.

27. A method of preparing vertical wall paint comprising:

mixing at least one heat reflective metal oxide pigment with a base paint formulation.

28. The method of claim 27, wherein said vertical wall paint comprises from 35 to 50% solids by weight, and from 30 to 40% solids by volume.

29. The method of claim 28, wherein said vertical wall paint comprises from 37 to 47% solids by weight, and from 32 to 38% solids by volume.